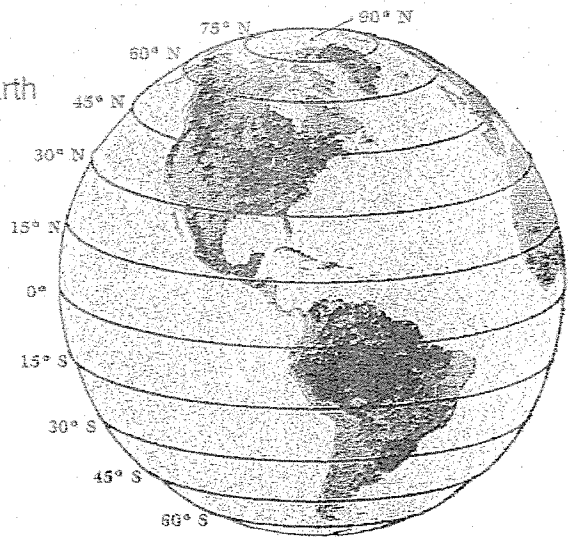
Important Facts about Latitude and Longitude

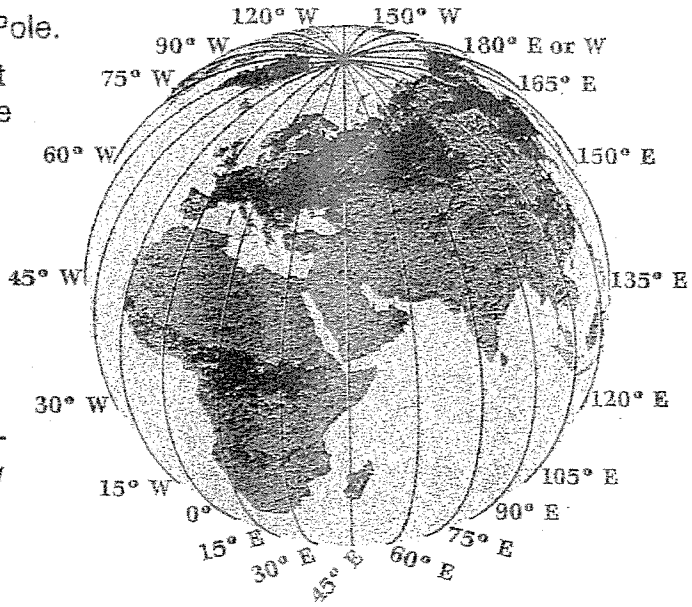
Latitude

- Latitude lines circle the globe in an east-west direction.
- Latitude measures how far north or south a point on Earth lies from the equator. (Latitude lines are also called parallels, as they are parallel to the equator.)
- The equator is at 0° latitude and separates Earth into Northern and Southern hemispheres.
- Locations north of the equator have latitudes between 0° (the equator) and 90° N (the North Pole).
- Locations south of the equator have latitudes between 0° (the equator) and 90° S (the South Pole).



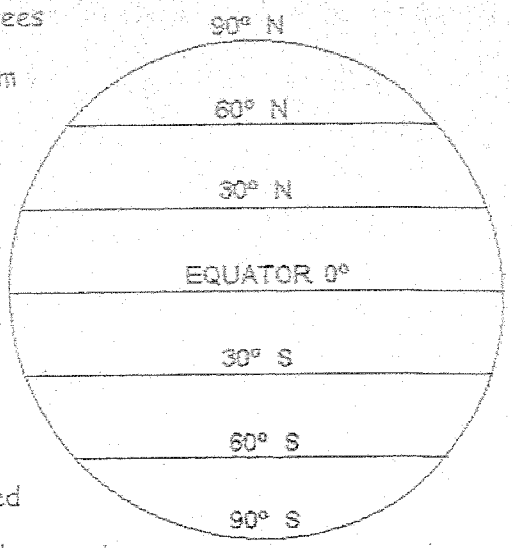
Longitude

- Longitude lines run from the North to the South Pole.
- Longitude measures how far east or west a point on Earth lies from the Prime Meridian. (Longitude lines are also called meridians.)
- The Prime Meridian, the line of longitude which passes through Greenwich, England, is the 0° longitude line.
- Longitude values to the east of the Prime Meridian can be specified by either 0° to 180° E or by positive values 0 to +180°
- Longitude values to the west of the Prime Meridian can be specified by either 0° to 180° W or by negative values 0 to -180°.



What is Latitude?

Latitude is defined as a measurement of distance in degrees north or south of the equator. The word latitude is derived from the Latin, "latus", meaning "wide."



There are ninety degrees of latitude from the equator to each of the poles. Latitude lines are pictured on the globe to the right. Latitude lines are parallel, that is they are the same distance apart. In fact, they are sometimes called parallels.

The equator is 0°. It divides the earth in half. It is called the equator all the way around the earth. You can image that the equator is like a belt on a skirt or a pair of jeans.

Positions on latitude lines above the equator are called "north" and are in the northern hemisphere. They are abbreviated N. St. John's, Newfoundland, for example, is near 49°N. Positions on latitude lines below the equator are called "south" and is abbreviated S. They indicate the position is in the southern hemisphere.

Complete the Following

a. Lines of latitude are _____ to the equator.

b. There are _____ degrees of latitude north and south of the equator.

c. The equator is _____ degrees.

d. Another name for latitude lines is _____ .

e. The equator divides the earth into _____ equal parts.

Write a definition of latitude.

_____

_____

_____

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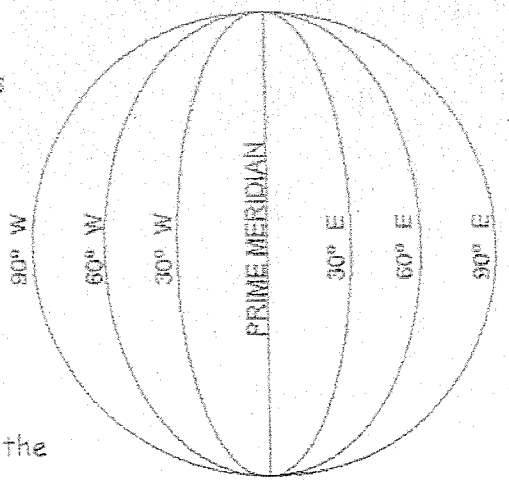
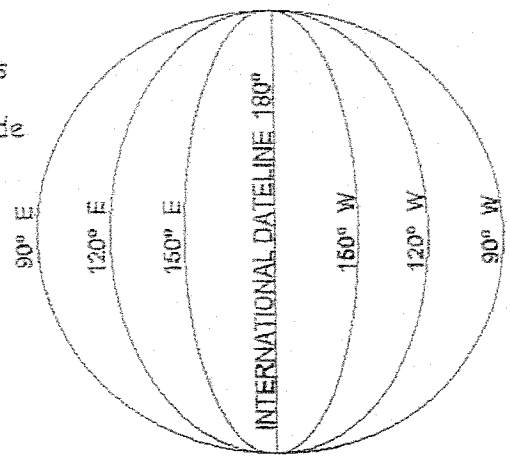
What is Longitude?

Longitude is defined as measurement of distance in degrees east or west of the prime meridian. The word is derived from the Latin, "longus", meaning "length". The prime meridian divides the earth in half too. It is also 0° and passes through the community of Greenwich, England.



The prime meridian as do all other lines of longitude, pass through the north and south pole. This is shown in the diagram to the right. These lines are not parallel. They make the earth look like a peeled orange.

Because the earth is round like a ball, not all longitude lines are visible. There are 180 other lines of longitude on the other side of the globe. But on the opposite side, the prime meridian is 180 ° and is called the International Date line.



Longitude lines to the left of the prime meridian give locations west, in the western hemisphere. Longitude lines to the right of the prime meridian give locations east, in the eastern hemisphere. St. John's, Newfoundland, for example is near the 52 ° W line of longitude.

Complete the Following

a. Longitude lines connect the _____ pole with the _____ pole.

b. The line of 0°C longitude is called the _____ .

c. Longitude lines give directions _____ and _____ of the prime meridian.

d. There are _____ degrees of longitude each side of the prime meridian.

e. Longitude lines are not _____ like latitude lines.

Write a definition of longitude.

_____

_____

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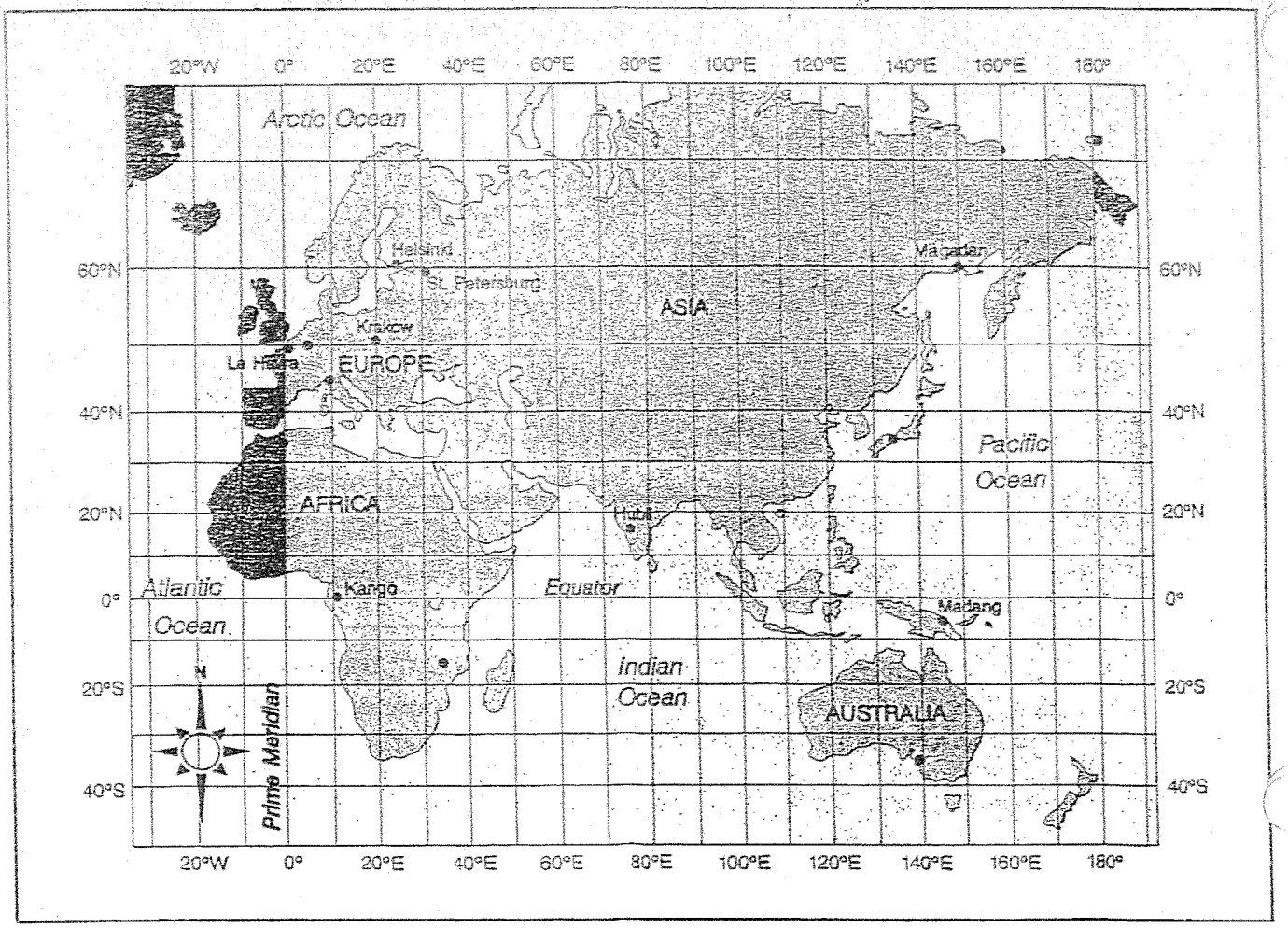
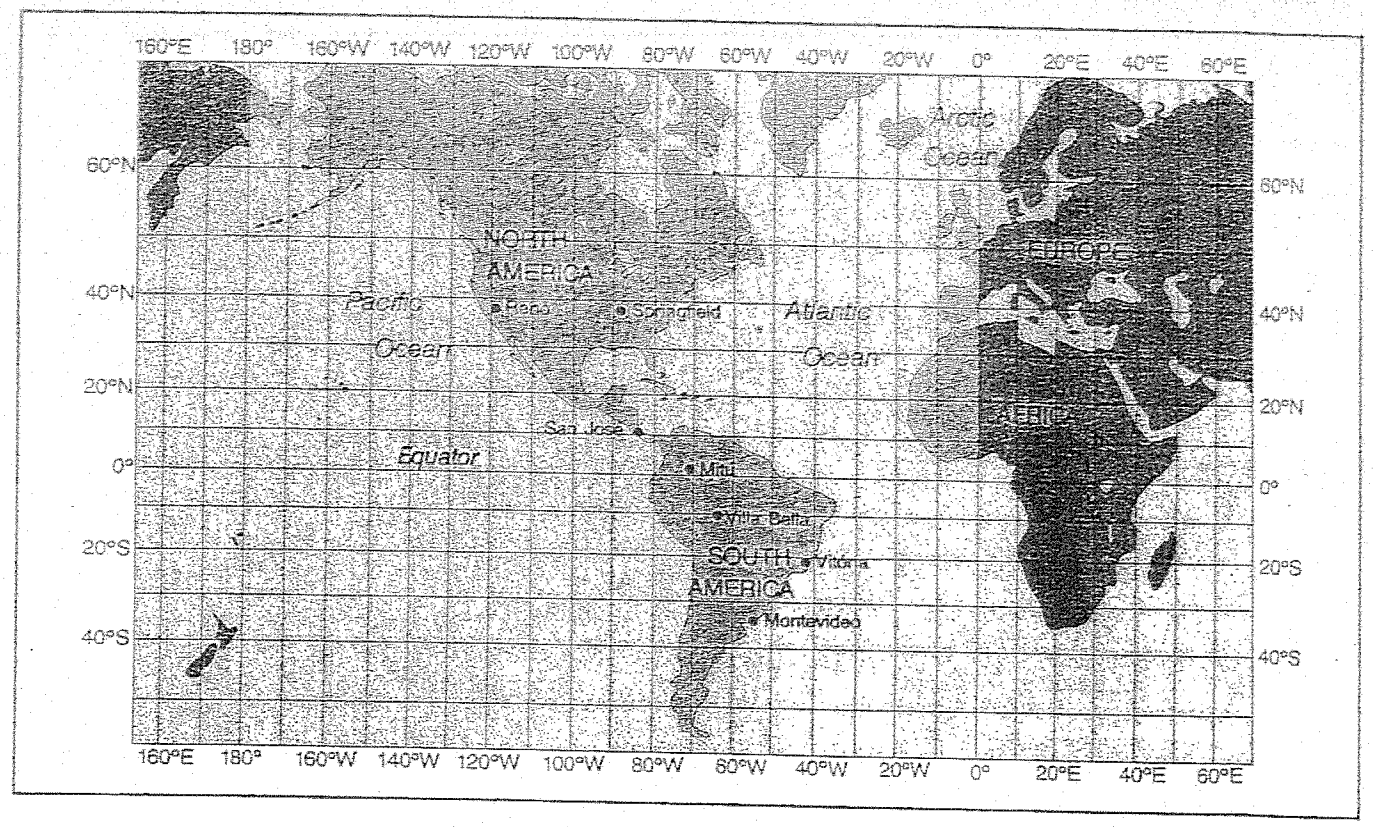
Using Latitude and Longitude



1. Label the cities at these locations on the map.
   a. 35° S, 140°E Murray Bridge
   b. 50°N, 5°E Namur
   c. 35°N, 135°E Osaka
   d. 45°N, 10°E Parma
   e. 15° S, 35°E Zomba
   f. 35°N, 0° Saida
2. Write the latitude and longitude coordinates of these cities.

	Latitude	Longitude
a. Helsinki	_____	_____
b. Le Havre	_____	_____
c. St. Petersburg	_____	_____
d. Madang	_____	_____
e. Krakow	_____	_____
f. Hubli	_____	_____

Using Latitude and Longitude



1. Trace the 70° W meridian in green.

   a. Is that line east or west of the Prime Meridian? _____

   b. Is most of the area shown on the map in the Eastern or Western Hemisphere? _____

2. Trace the Equator in red.
   Draw an N just north of the Equator.
   Draw an S just south of the Equator.

3. a. What city is near the place where the Equator and 70°W cross?

   _____

   b. What are its coordinates? _____, 70°W.

4. Find the missing coordinate for these cities.

   a. Springfield 40°N , _____

   b. Vitória _____, 40°W

   c. Reno _____, 120°W

   d. San José 10°N , _____

   e. Villa Bella _____, 65°W

   f. Montevideo 35°S , _____